

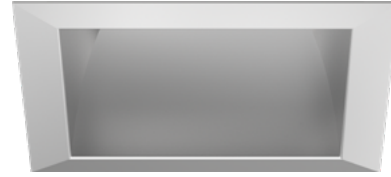
LTR-4SQD SpectraSync

LITEISTRY 4" SQUARE DOWNLIGHT WITH COLOR TUNING

LITEISTRY™

FEATURES

- 4" architectural LED downlight delivering 600 – 2000 lm
- Four beam distributions from 0.6 to 1.2 Spacing Criteria
- Quiet reflector appearance with superior 50° optical cutoff
- SpectraSync™ Color Tuning technology allows the flexibility to tailor CCT to aesthetic preferences
- Available in Dim to Warm (2200K-3000K) or Tunable White (2700K-5000K or 2700K-6500K), 90+ CRI
- Available for New Construction (non-IC), IC and Chicago Plenum applications
- Standard with 0-10V dimming to 5%
- NX Distributed Intelligence™ wired and wireless controls capability available



RELATED PRODUCTS

Ø 3" LITEISTRY Family

Ø 4" LITEISTRY Family

Ø 6" LITEISTRY Family

CONTROL TECHNOLOGY



SPECIFICATIONS

CONSTRUCTION

- New Construction: Painted black durable steel platform with pre-installed bar hangers
- Pre-wired junction box with snap-on covers for easy access
- Snap-in connection from driver compartment allows easy installation
- Light engine connections use plenum rated (CMP) cable

OPTICS

- Visually pleasing 50° cutoff to source and source image
- The light distribution is free of distracting bright spots or pixelation and the perimeter has a smooth transition
- Optical grade silicone lens integral to light engine
- High purity four-panel aluminum reflector, self-flanged
- Flush Mount flange option with mud-in ring available
- Large selection of anodized finishes and colors
- Painted cones and flange options available

ELECTRICAL

- LED array with 3 SDCM color consistency
- Dim to Warm (2200K-3000K) or Tunable White (2700K-5000K or 2700K-6500K) options available
- 90+ CRI standard
- L70 at >60,000 hours (TM-21)
- Universal voltage 120V–277V driver
- UL Class 2, inherent short circuit and overload protection, RoHS compliant
- Flicker free 0–10V dimming to 5%
- NX Distributed Intelligence or Lutron Vive control options available
- Emergency Battery Pack option available with remote test switch an indicator light
- Refer to additional spec sheets for information on [standard LITEISTRY](#) or [PowerHUBB™ PoE enabled](#) solutions

INSTALLATION

- Accommodates ceiling thicknesses up to 1.25"
- Universal adjustable mounting brackets also accept 1/2" EMT conduit or 1/2" or 3/4" lathing channel (by others) or Prescolite accessory bar hangers (B24 or B6)
- Light Engine/Driver fully serviceable from above or below the ceiling except with Control options which require top access for driver replacement.

CERTIFICATIONS

- cCSAus certified to UL 1598
- Suitable for wet locations, covered ceiling EM/EMR: Suitable for damp locations
- EM/EMR: Certified under UL 924 standard for emergency lighting and power equipment
- Approved for 8 (4 in/ 4 out) No. 12AWG conductors rated for 90°C through wiring
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction. Materials under Trade Agreements effective 6/6/2020. See [Buy American Solutions](#).

WARRANTY

- 5 year warranty
- See [HLI Standard Warranty](#) for additional information

KEY DATA	
Lumen Range	600–2000
Wattage Range	10-36
Efficacy Range (LPW)	50-60*
Life (Hours)	L70 / >60,000
Input Current (mA)	83-300 (120V)

* Based on Specular, 30K, 90 CRI



LTR-4SQD SpectraSync

LITEISTRY 4" SQUARE DOWNLIGHT WITH COLOR TUNING

DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

CATALOG #: _____

ORDERING GUIDE

Example: LTR-4SQD-H-SL10L-DMTW-LTR-4SQD-T-SL2230TD9MD-SS

CATALOG # _____

HOUSING

LTR-4SQD-H		Lumen Package		Lumen Output		Driver Options		Control Options		Voltage		Housing Options	
Aperture/Shape/Function													
LTR-4SQD-H	4" Square Downlight New Construction Housing	SL	Standard Lumen	06L	600	DMTW	SpectraSync™ Dim to Warm, 0-10V Dimming to 5% ¹	NXE	NX Enabled, Dual SmartPorts	Standard	120-277V	CP	Chicago Plenum ^{7,8,9}
				10L	1000							IC	IC rated ^{7,8,9}
		ML	Medium Lumen	15L	1500	DMT	SpectraSync™ Tunable White, 0-10V Dimming to 5% ²	NXWE	NX Wireless Enabled			EM	Emergency Battery Pack with integral test switch and indicator light ^{7,9}
				20L	2000							NXWD	NX Wireless Enabled, Dual SmartPorts
												F	Fuse ⁷

TRIM

LTR-4SQD-T		Lumen Package		CCT		CRI		Distribution	
Aperture/Shape/Function									
LTR-4SQD-T	4" Square Downlight Light Engine/Trim Assembly	SL	Standard Lumen	2230TD	2200K-3000K SpectraSync™ Dim to Warm	9	90+CRI	NR	Narrow (0.6 SC /37°)
		ML	Medium Lumen	2750T	2700K-5000K SpectraSync™ Tunable White			MD	Medium (0.8 SC /46°)
				2765T	2700K-6500K SpectraSync™ Tunable White			WD	Wide (1.0 SC /60°)
								XW	Extra Wide (1.2 SC /69°)

TRIM CONTINUED

Reflector Finish		Reflector Color		Flange Color Options		Lower Trim Options		Reflector Options	
<i>Finish not applicable with painted reflectors (WC or BC)</i>		<i>Standard Clear</i>		<i>Standard matches reflector color</i>		EM		AM	
S	Specular	CG	Champagne Gold	WT	White Flange ³	Pre-punched reflector for EM integral test switch and indicator		Antimicrobial Coating ⁴	
SS	Semi-Specular	BL	Black	BT	Black Flange ³	FM		Flush Mount Mud-in Ring ⁵	
VS	Softglow®	LW	Light Wheat						
VSS	SoftSheen™	PW	Pewter						
		WC	Painted White Cone and Flange						
		BC	Painted Black Cone and Flange						

Accessories

- B24** Set of two (2) 24" bar hangers for T-bar ceilings
- B6** Set of two bar hangers for ceiling joist up to 24" centers
- FMR4-SQ** Flush Mount Flange Mud-In Ring, 4" Square
- LiteGear** LiteGear® Inverter, 125VA-250VA
- LPS Series** LightPower Micro-Inverter, 20VA-55VA
- MOR4-SQ-WH** Metal Oversized Ring, 4" Square, White (8.25" outer dimension)
- MOR4-SQ-BL** Metal Oversized Ring, 4" Square, Black (8.25" outer dimension)

Notes:

- 1 Must select 2230TD with DMTW driver
- 2 Must select either 2750T or 2765T with DMT driver
- 3 WT not needed for WC; BT not needed for BC.
- 4 AM available with WC or Specular Clear (S or SWT). Consult factory for other colors.
- 5 Flush Mount Flange (FM) requires FMR accessory (sold separately)
- 6 LV available only with DMTW driver option.
- 7 Housing options (except Fuse) not available in combination.
- 8 IC, CP available in 06L.
- 9 Not available with Control options.

LTR-4SQD SpectraSync

LITEISTRY 4" SQUARE DOWNLIGHT WITH COLOR TUNING

CONTROLS

NX Distributed Intelligence™ Lighting Controls:

Supports both applications in a variety of deployment options- wired, wireless, hybrid. Integrates with and enables a wide array of luminaires including those with SpectraSync™ Color Tuning Technology.



NX INTEGRATED CONTROLS REFERENCE								
NX Option	Sensor	Networkable	Scheduling	Occupancy	Daylight Harvesting	0-10V Dimming	On/off Control	Bluetooth® App Programming
NX Networked – Wired								
NXE	N/A	Yes	Yes	No	No	Yes	Yes	Requires NXBTC/R ¹
NX Networked – Wireless								
NXWE ²	N/A	Yes	Yes	No	No	Yes	Yes	No ³
NX Networked – Wired/Wireless								
NXWD	N/A	Yes	Yes	No	No	Yes	Yes	Requires NXBTC/R ^{1,3}

- 1 NXBTC/R needs to be plugged into an available NX SmartPort™ on the fixture network
- 2 Programming via App requires factory assistance
- 3 To program NXWE option, need to consult factory. If connected to an area controller, programming can be done from that

SpectraSync™ Color Tuning Technology:

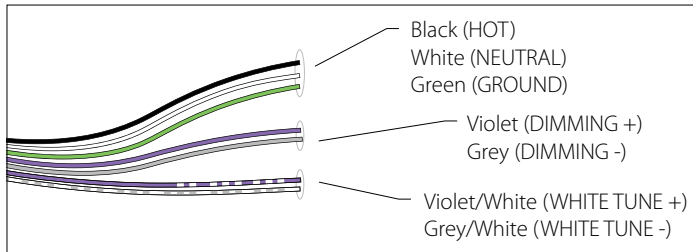
Control your space based on the needs of the application, specific activities throughout the day and preferences of the occupants with distinct SpectraSync™ Color Tuning Technologies.



SPECTRASYNCH COLOR TUNING TECHNOLOGY		
Mode	Kelvin Range	Description
Dim to Warm	2200K-3000K	Mimics the familiar warming effect that occurs with traditional incandescent sources as they are dimmed
Tunable White	2700K-5000K 2700K-6500K	Offers users the ability to tailor CCT to their personal preference, enhancing task visibility, material and colors or the aesthetics of the space
Scheduled White	2700K-5000K 2700K-6500K	Mimics the rhythm of natural light or follows an alternative user-defined schedule throughout the day, enhancing an occupant's mood and well-being

SpectraSync Tunable White

Available in two options: 2750T (2700K–5000K) or 2765T (2700K–6500K). Requires two 0–10V controllers, one for intensity and one for CCT. Minimum 5% dimming.

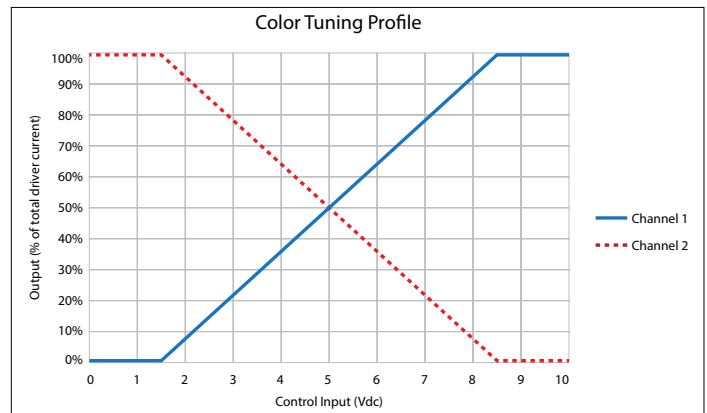


SpectraSync Tunable White luminaires are provided with two 0–10V circuits. The violet and grey circuit is for wiring to any qualified 0–10V controller for dimming. The violet/white and grey/white circuit is for wiring to any qualified 0–10V controller for Tunable White CCT control.

Controller Manufacturer Data

SpectraSync Tunable White was designed to be used with sinking style dimmers (provided by others) and is compatible with:

- Hubbell Control Solutions (HCS): NX Distributed Intelligence™ Room Controllers (NXRC) and In-fixture Controllers (NXFM)
- Lutron: DVTV, DVSTV, and NFTV dimmers
- Wattstopper: ADF120277 and CD4BL (Titan) dimmers



To enable scheduling and for use with NX wall control preset stations please refer to Hubbell Control Solutions NX SpectraSync technical sheet.

LTR-4SQD SpectraSync

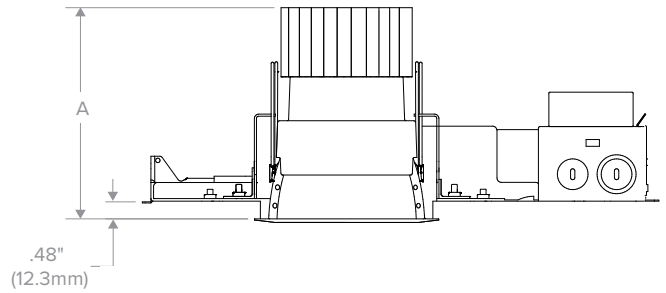
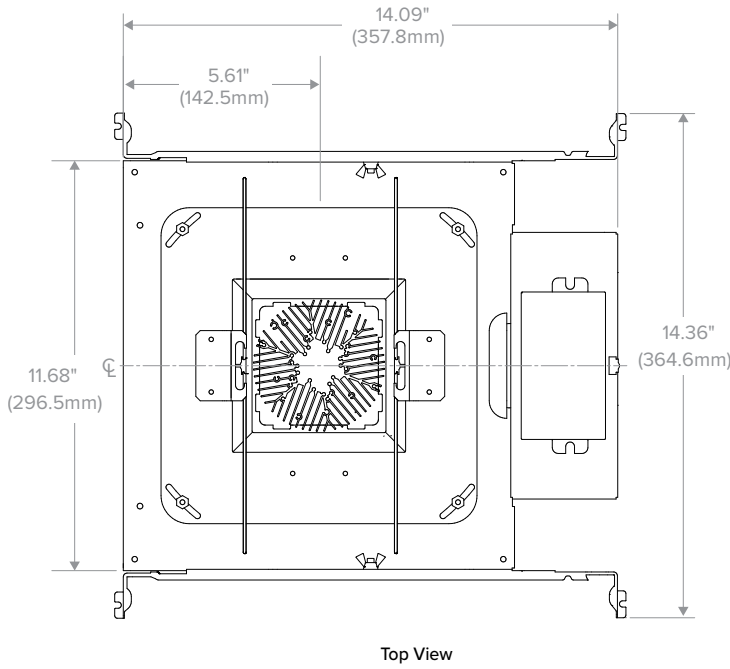
LITEISTRY 4" SQUARE DOWNLIGHT WITH COLOR TUNING

DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

CATALOG #: _____

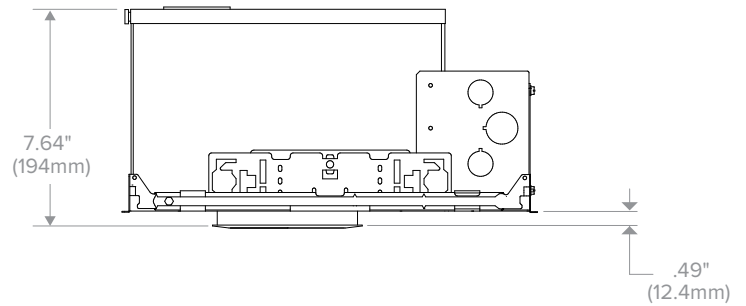
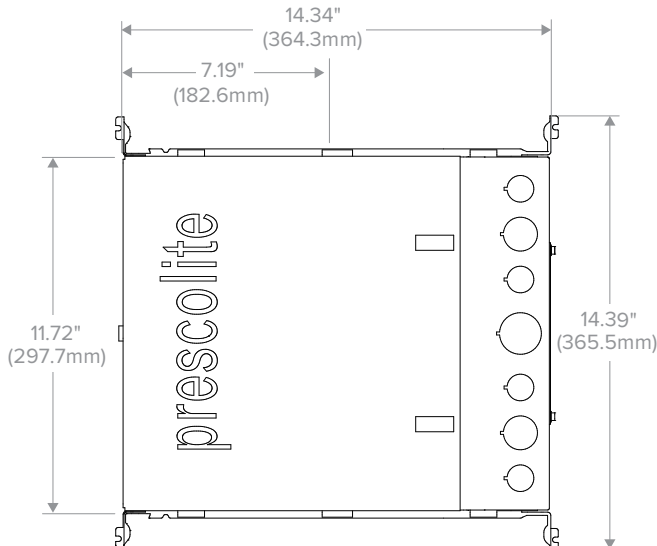
DIMENSIONS



Dimensional Data	
Aperture	4.00" (101.6mm) SQ
Flange	Standard 5.25" (133.4mm) SQ
	Flush Mount 4.69" (119.1mm) SQ
Ceiling Cutout	Standard 5.00" (127.0mm) SQ
	Flush Mount 5.00" (127.0mm) SQ
Ceiling Thickness	0.50" to 1.25" (12.7mm to 31.8mm)

Lumen Package	"A"
06L-10L	4.83" (122.7mm)
15L-20L	7.20" (182.9mm)

LTR-4SQD-H New Construction



Dimensional Data	
Aperture	4.00" (101.6mm) SQ
Flange	Standard 5.25" (133.4mm) SQ
	Flush Mount 4.69" (119.1mm) SQ
Ceiling Cutout	Standard 5.00" (127.0mm) SQ
	Flush Mount 5.00" (127.0mm) SQ
Ceiling Thickness	0.50" to 1.25" (12.7mm to 31.8mm)

LTR-4SQD-H IC/CP

LTR-4SQD SpectraSync

LITEISTRY 4" SQUARE DOWNLIGHT WITH COLOR TUNING

PHOTOMETRY

LTR-4SQD-H-ML20L-DMT / LTR-4SQD-T-ML2765T9NRS

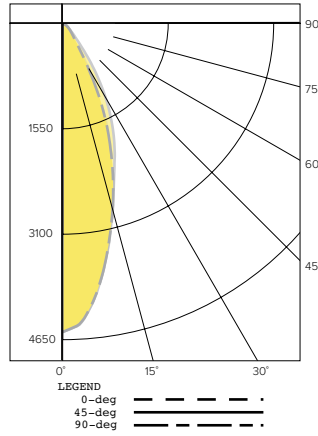
LUMINAIRE DATA

Test No.	R19.00949-11
Description	2000 lm, Narrow, 3000K, 90 CRI
Delivered Lumens	2132
Watts	35.3W
Efficacy	60.0
Mounting	Recessed
Spacing Criterion	0.6
Beam Angle (FWHM)	37

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	2004	94.0
0-60	2123	99.6
0-90	2132	100.0
0-180	2132	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	4316	4316	4316
5	4035	4037	4033
15	2670	2661	2658
25	1259	1631	1256
35	269	624	270
45	105	127	105
55	22	29	23
65	5	6	5
75	2	2	2
85	1	1	1
90	0	0	0

LTR-4SQD-H-ML20L-DMT / LTR-4SQD-T-ML2765T9MDS

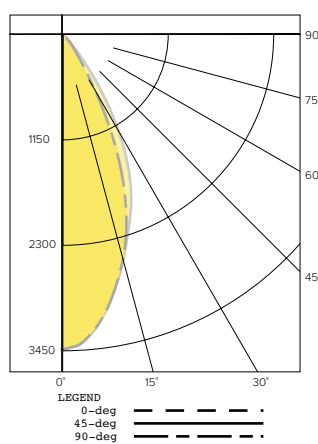
LUMINAIRE DATA

Test No.	R19.00950-11
Description	2000 lm, Medium, 3000K, 90 CRI
Delivered Lumens	2059
Watts	35.3W
Efficacy	58.0
Mounting	Recessed
Spacing Criterion	0.8
Beam Angle (FWHM)	46

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1917	93.1
0-60	2050	99.6
0-90	2059	100.0
0-180	2059	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	3202	3202	3202
5	3081	3085	3083
15	2377	2391	2383
25	1318	1642	1327
35	340	689	346
45	115	144	116
55	24	32	24
65	6	6	5
75	2	3	2
85	1	1	1
90	0	0	0

LTR-4SQD-H-ML20L-DMT / LTR-4SQD-T-ML2765T9WDS

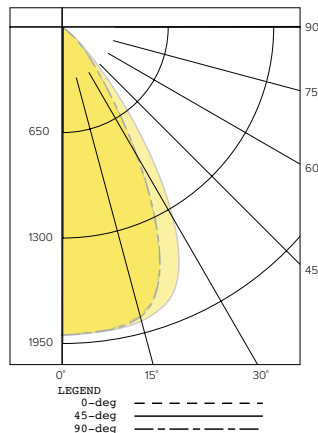
LUMINAIRE DATA

Test No.	R19.01045-11
Description	2000 lm, Wide, 3000K, 90 CRI
Delivered Lumens	1814
Watts	35.3W
Efficacy	51.0
Mounting	Recessed
Spacing Criterion	1.0
Beam Angle (FWHM)	60

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1609	88.7
0-60	1803	99.4
0-90	1814	100.0
0-180	1814	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	1662	1662	1662
5	1654	1658	1656
15	1613	1645	1622
25	1214	1484	1223
35	479	819	486
45	166	224	167
55	33	45	34
65	6	7	6
75	3	3	3
85	1	1	1
90	0	0	0

LTR-4SQD SpectraSync

LITEISTRY 4" SQUARE DOWNLIGHT WITH COLOR TUNING

PHOTOMETRY CONTINUED

LTR-4SQD-H-ML20L-DMT / LTR-4SQD-T-ML2765T9XWS

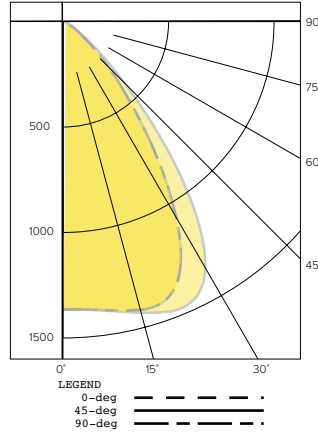
LUMINAIRE DATA

Test No.	R19.00952-11
Description	2000 lm, Extra Wide, 3000K, 90 CRI
Delivered Lumens	1770
Watts	35.3W
Efficacy	50.0
Mounting	Recessed
Spacing Criterion	1.2
Beam Angle (FWHM)	69

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1484	83.9
0-60	1757	99.3
0-90	1770	100.0
0-180	1770	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	1195	1195	1195
5	1199	1201	1199
15	1238	1251	1237
25	1139	1273	1136
35	647	929	644
45	237	328	237
55	42	64	43
65	7	8	7
75	3	3	3
85	1	1	1
90	0	0	0

LTR-4SQD SpectraSync

LITEISTRY 4" SQUARE DOWNLIGHT WITH COLOR TUNING

DATE: _____ LOCATION: _____

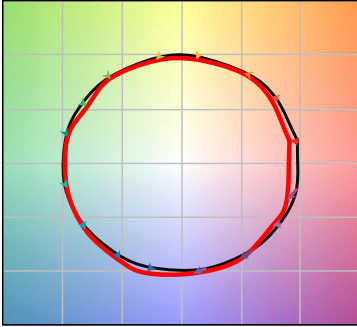
TYPE: _____ PROJECT: _____

CATALOG #: _____

TM-30 DATA

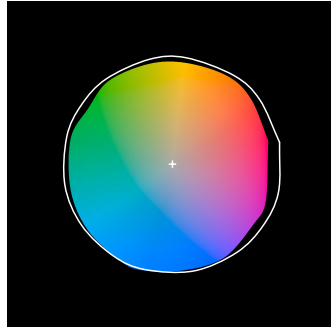
SPECTRASYNCTM TUNABLE WHITE (2765T)

COLOR VECTOR GRAPHIC
2700K, 90+ CRI

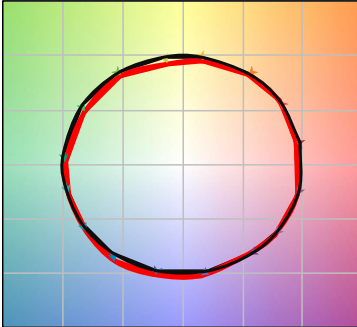


— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
2700K, 90+ CRI

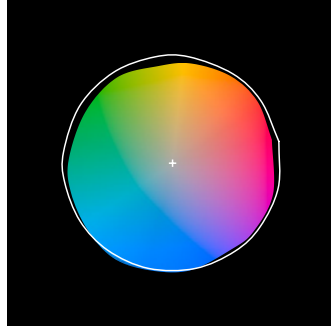


COLOR VECTOR GRAPHIC
4600K, 90+ CRI

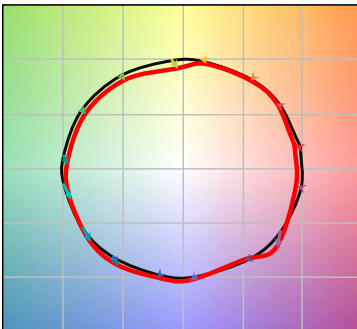


— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
4600K, 90+ CRI

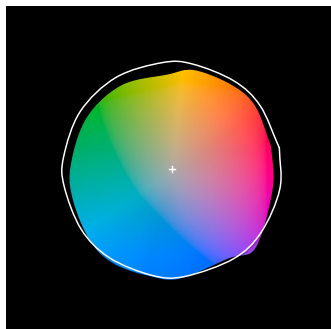


COLOR VECTOR GRAPHIC
6500K, 90+ CRI



— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
6500K, 90+ CRI



TEST RESULTS - TUNABLE WHITE @ 1500 LUMENS (NOMINAL)			
Value	2700K	4600K	6500K
Luminous Flux (lm)	1407	1604	1660
Wattage (W)	23.9	24.3	24.6
Efficacy (lm/W)	59	66	68
R _f	90	89	87
R _g	97	98	96
CCT (K)	2817	4588	6518
D _{UV}	-0.0013	-0.0040	0.0018
x	0.4482	0.3565	0.3131
y	0.4047	0.3531	0.3273
CIE R _a	91	95	94
CIE R _g	47	81	76

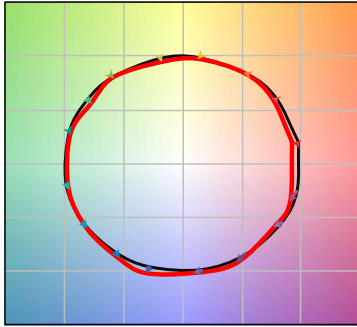
LTR-4SQD SpectraSync

LITEISTRY 4" SQUARE DOWNLIGHT WITH COLOR TUNING

TM-30 DATA CONTINUED

SPECTRASYNCTM DIM TO WARM (2230TD)

COLOR VECTOR GRAPHIC
3000K, 90+ CRI @ 100%

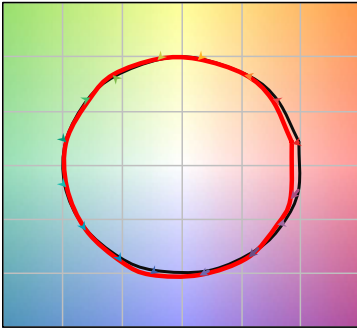


— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
3000K, 90+ CRI @ 100%

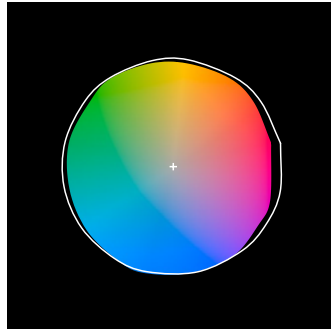


COLOR VECTOR GRAPHIC
2600K, 90 CRI @ 50% DIM

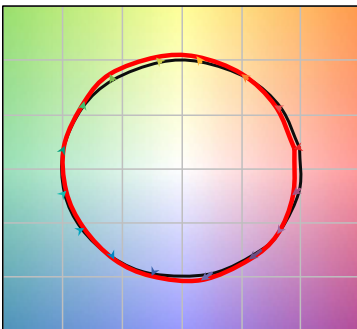


— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
2600K, 90 CRI @ 50% DIM

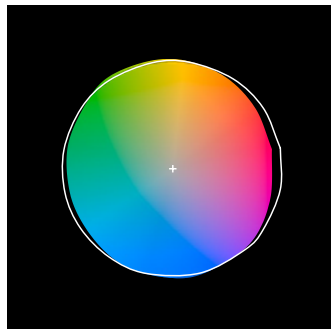


COLOR VECTOR GRAPHIC
2200K, 90 CRI @ 5% DIM



— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
2200K, 90 CRI @ 5% DIM



TEST RESULTS - DIM TO WARM @ 3 DIMMING LEVELS

Value	100%	50% Dim	5% Dim
Luminous Flux (lm)	1501	772	53
Wattage (W)	24.3	14	3.4
Efficacy (lm/W)	62	55	16
R _f	90	92	91
R _g	97	99	102
CCT (K)	3123	2590	2282
D _{uv}	-0.0017	-0.0015	-0.0029
x	0.4261	0.4662	0.4907
y	0.3965	0.4082	0.4068
CIE R _a	92	93	93
CIE R _g	53	60	64



LTR-4SQD SpectraSync

LITEISTRY 4" SQUARE DOWNLIGHT WITH COLOR TUNING

DATE: _____ LOCATION: _____

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CATALOG #: _____

ELECTRICAL DATA

DRIVER DATA	
Input Voltage	120-277 V
Input Frequency	50/60 Hz
Power Factor	≥0.90
THD	<20%
EMI Filtering (FCC 47 CFR Part 15)	Class A

WATTAGE DATA		
Lumen Output	Nominal Lumens	WATTAGE
06L	600	10
10L	1000	18
15L	1500	25
20L	2000	36

* Wattage may vary based on configuration and options selected

ADDITIONAL INFORMATION

Central Inverters

For full fixture output in back-up mode, we recommend you visit www.dual-lite.com for your Central Lighting Inverter options. Please contact your local Hubbell representative for any assistance with proper sizing and loading of your inverter selection. Central lighting inverters must be ordered separately.

LiteGear: www.dual-lite.com/products/litegear_lg_series

LPS Series: www.dual-lite.com/products/lps

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